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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,390	11/05/2001	Zhong-Min Wei	21829/111 (EBC-009)	4469

7590 04/22/2003
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EXAMINER

PARA, ANNETTE H

ART UNIT	PAPER NUMBER
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1661

DATE MAILED: 04/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,390

Applicant(s)

WEI ET AL.

Examiner

Annette H. Para

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-85 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-41 and 75-85 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's election with traverse of Group I in paper No. 7 is acknowledged. The traversal is on the ground that the restriction requirement as set forth in the Office action of 12/31/2002 is improper because the two groups of invention are related to one another and would necessarily require common areas of search and consideration.

Applicants' arguments regarding the coexamination of all groups are not found persuasive because of the following reason: the inventions are drawn to two different methods that use divergent products and plants, and therefore, the modes of operation, effects, and results are all different, as stated in the last Office action. The method of Group II requires the transformation of a plant with a DNA molecule encoding elicitor protein not required by the method of Group I. Group I requires a topical treatment of the plant or plant parts with elicitor protein not required by the method of Group II.

Therefore, the restriction requirement between inventions I-II is still deemed proper and is therefore made FINAL.

Claims 1-85 are pending. Claims 1-41, and 75-85 are under examination. Claims 42-74 are withdrawn from consideration as being drawn to a non-elected invention.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 and claims 75-79 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1- 2, 5, 8, 11, 13, 15, 17, 19, of US Patent No. 5, 776, 889. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-7 and 75-79 of the instant application fully contain the metes and bounds of claims 1-2, 5, 8, 11, 13, 15, 17, 19 of US Patent No. 5, 776, 889.

Claims 1-17, 26-41, 80-85 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 09/835,684.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-17, 26-41, and 81-85 of the instant application contain the metes and bounds of claims 1-20 of copending application No. 09/835,684.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 and 75-79 are rejected under 35 U.S.C. 102(e) as being anticipated by Wei et al. Wei et al teach a hypersensitive response elicitor protein sprayed on a plant making it resistant to pathogen. The plants sprayed with the protein showed greater height and girth than the one treated with buffer

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(column 23, lines, 34-36). The plants are inherently desiccation resistant, absent evidence to the contrary.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claims 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Qiu et al. US patent 6,277,814

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Qiu et al. teach an elicitor protein which sprayed on plant promotes its earlier flowering and growth enhancement (Paragraph 45, example 19).

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 1-7, 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Wei et al WO 00/20452. Wei et al. teach a hypersensitive response elicitor protein which, when applied to a plant enhance plant growth and impart disease resistance. The treated plant is inherently desiccation resistant, absent evidence to the contrary.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-7, 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Wei et al WO 00/28055. Wei et al. teach a hypersensitive response elicitor protein which, when applied to a plant enhance plant growth and impart disease resistance. The treated plant is inherently desiccation resistant, absent evidence to the contrary.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-7, 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Wei et al WO 99/11133. Wei et al. teach a hypersensitive response elicitor protein which, when applied to a plant enhance plant growth and impart disease resistance. The treated plant is inherently desiccation resistant, absent evidence to the contrary.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when

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the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-7, 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Wei et al WO 00/20616. Wei et al. teach a hypersensitive response elicitor protein which, when applied to a plant enhance plant growth and impart disease resistance. The treated plant is inherently desiccation resistant, absent evidence to the contrary.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17, 26-41, 80-85 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 09/835,684 which has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. Application 09/835,684 teaches a hypersensitive response elicitor protein applied to fruits or vegetables to inhibit postharvest desiccation.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that

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the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al. US Patent 5,776,889 in view of Laurie et al.

Wei et al teach the application of an elicitor protein to an ornamental plant. The plant is inherently desiccation resistant, absent evidence to the contrary. The hypersensitive response elicitor protein is derived from a pathogen selected from the group consisting of *Erwinia*, *Pseudomonas*, *Xanthomonas*.

Wei et al. do not teach using this method on a cutting removed from an ornamental plant.

Laurie et al. teach the cutting of flowers. It would have been obvious to apply the method of Laurie et al. to plant treated by the method of Wei et al. One would have been motivated to do so given the importance of the cut flower crops. There would have been a reasonable expectation of success, given the knowledge that this method works on a complete plant as taught by Wei et al. Thus, the invention as a whole was clearly *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Claim Rejections - 35 USC § 112

Claim Rejections - 35 USC § 112 2nd paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-40 and 75-85 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite in the recitation of "under conditions effective to inhibit desiccation". It is unclear what the conditions are.

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Claim 1, 8, 13, 18, 25, 31, 37, 75, 81 are indefinite in the recitation "ornamental plant". The recitation "ornamental plant" is not defined in the specification so it is not clear which plant the applicants define as an ornamental one.

Conclusion

No claim is allowed.


Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette H. Para whose telephone number is (703) 308-6327. The Examiner can normally be reached Monday through Thursday from 6:00 am to 4:30 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Bruce Campell, can be reached on (703) 308-4205. The fax number for the group is (703) 305-3014 or (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application should be directed to the Matrix Customer Service Center whose telephone number is (703) 308-0196.

A.H.P


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